



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/583,398

10/16/2006

Young-Chan Moon

9290-2/NP

2630

28997 7590 11/20/2009
HARNESS, DICKEY, & PIERCE, P.L.C
7700 Bonhomme, Suite 400
ST. LOUIS, MO 63105

EXAMINER

ENTEZARI, MICHELLE M

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

11/20/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/583,398	Applicant(s) MOON ET AL.	
	Examiner MICHELLE ENTEZARI	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>All IDS considered</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings were received on June 16, 2006. These drawings are accepted.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1 and 6** are rejected under 35 U.S.C. 102(b) as being anticipated by Katoh et al. (US 6289125 B1).

Regarding claims 1 and 6, Katoh et al. disclose a method for scanning image using a scanning device (abstract), comprising: (a) determining a coordinate value of position

Art Unit: 2624

for a surface having the image data of a scanned object thereon (coordinates of the bill on the glass, col. 2, lines 5-10; position coordinates stored in memory, col. 27, lines 60-68; positioning mark coordinates, col. 28, lines 5-15); (b) collecting the image data by matching the image data with the determined coordinate value of position for the surface (extract edges and coordinates, col. 2, lines 10-15; size and shape already known, reference coordinates and slope specify region to be extracted, col. 28, lines 5-20; matched against a reference, col. 38, lines 25-30; goodness of fit, col. 35, lines 25-35); and (c) synthesizing an entire image using the collected image data and the determined coordinate value of the position matched with the collected image data (extract an image, col. 2, lines 15-25; transform image data device has scanned, col. 4, lines 45-60; original RGB data sent, positioning marks and specified pattern converted to binary values, col. 28, lines 15-30).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeshima (US 4701805).

Regarding claims 1 and 6, Maeshima discloses a method and device for scanning image using a scanning device (abstract), comprising: (a) determining a coordinate value of position for a surface having the image data of a scanned object thereon (coordinates, col. 5, lines 35-50; col. 21, lines 20-30); (b) collecting the image data by matching the image data with the determined coordinate value of position for the surface (coordinate points correspond to points on the glass, image bearing face toward coordinate face, points indicated by coordinates, col. 5, lines 45-50; reference point SP on the glass, identifying size and position of the original, col. 21, lines 25-30); and (c) synthesizing an entire image using the collected image data and the determined coordinate value of the position matched with the collected image data (splice image data from 2 CCDs, abstract; scanning covers entire area of the glass, resulting image can be accommodated in the copy sheet, col. 21, lines 30-40).

Maeshima does not explicitly describe "matching" coordinates, however, as the template is placed on the image bearing face to be visualized, it would have been obvious at the time of the invention to one of ordinary skill in the art that this is done so matching of the coordinates to the image surface may be performed.

Regarding claims 2 and 7, Maeshima discloses the method and device of claims 1 and 6. Maeshima further discloses step (c) of synthesizing the entire image, information for positional movement of the scanning device in the direction of X and Y axes is

Art Unit: 2624

further used (image magnification or reduction is changed by variation of scanning speed, col. 12, lines 35-55; quantity of information supplied to the memories from the CCDs changes in accordance with the image magnification ratio, col. 14, lines 35-45; X indicates coordinates in the main scanning direction and Y indicates coordinates in the sub-scanning direction, col. 17, lines 5-10 and col. 21 lines 20-30).

Regarding claims 3 and 8, Maeshima discloses the method and device of claims 1 and 6. Maeshima further discloses the scanning device comprises an image scanning part for performing the function of scanning the image (image sensors, CCDs, abstract; write image signals into shift memory, CCD scanning, col. 14, lines 35-45), and a position detecting part for determining the coordinate value of the position for the surface (position of the original image detected, col. 6, lines 35-40; col. 7, lines 5-10; detecting coordinates of the position of the original, col. 10, lines 60-65; optical unit detects home position and leading end, col. 11, lines 5-10; three position sensors, col. 12, lines 1-10; logic circuit for detecting coordinates, col. 21, lines 40-60).

Regarding claims 4 and 9, Maeshima discloses the method and device of claims 1 and 6. Maeshima does not explicitly disclose steps (a) and (b) are performed simultaneously, however, as CPU executes data setting in the various counters of the image processing units 602, 602' and the image editing units 604, 604' prior to or during the original scanning operation (col. 11, lines 15-20), it would have been obvious at the

Art Unit: 2624

time of the invention to one of ordinary skill in the art that these operations could be performed simultaneously as indicated through use of a CPU.

Regarding claim 5, Maeshima discloses the method of claim 1. Maeshima does not explicitly disclose between the step (b) and the step (c), (b1) storing the collected image data matched with the coordinate value of the position for the surface. However, as Maeshima discloses storing the image data (col. 10, lines 35-40) and that the number of bits in the main scanning direction and the number of lines between transition points in the sub-scanning direction are calculated from the coordinates of the trimming area and the image magnification ratio are all stored in the RAM (col. 18, lines 5-20), it would have been obvious at the time of the invention to one of ordinary skill in the art to store the collected image data matched with the coordinate value of the position for the surface.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. US 4303948
- b. US 20030158701
- c. US 5138670

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHELLE ENTEZARI whose telephone number is (571)270-5084. The examiner can normally be reached on M-Th, 7:30am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on (571)272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michelle Entezari/
Examiner, Art Unit 2624

/VIKKRAM BALI/
Supervisory Patent Examiner, Art Unit 2624